

What is claimed is:

1. A method of making an acetabular prosthesis comprising the steps of:

acquiring a first set of data defining in three dimensions at least a portion of a bone of a patient;

computing a second set of data based upon the first set of data;
and

manufacturing said prosthesis to include an acetabular cup and an attachment part extending therefrom,

wherein said manufacturing step includes the step of forming said attachment part based on the second set of data.

2. The method of claim 1, wherein said second set of data defines in three dimensions said attachment part.

3. The method of claim 1, wherein:

said attachment part comprises a flange extending from said acetabular cup, and

said flange has defined therein a number of throughholes configured to receive an anchoring element.

4. The method of claim 1, wherein said manufacturing step further includes the steps of:

forming said attachment part to include a bone-facing surface and a tissue-facing surface, and

forming said tissue-facing surface to be a partial facsimile of a surface of said bone.

5. The method of claim 4, wherein said manufacturing step further includes the step of forming said bone-facing surface to possess a shape complementary to a portion of the surface of said bone.

6. The method of claim 1, wherein:

said attachment part possesses a cup interface end portion and a free end portion, and

said forming step includes forming said attachment part with a uniform thickness extending from said cup interface end portion to said free end portion.

7. The method of claim 1, wherein said manufacturing step further includes the steps of:

forming said attachment part to include a bone-facing surface and a tissue-facing surface, and

forming said bone-facing surface to possess a shape complementary to a portion of a surface of said bone.

8. The method of claim 1, further comprising the step of acquiring a third set of data defining in three dimensions other bone structure of the patient, at least some of said other bone structure contralaterally corresponding to said bone of the patient, wherein:

said manufacturing step includes the step of arranging an angular

orientation of said acetabular cup relative to at least one of said attachment part and the bone of the patient based on said third set of data.

9. A method of making a prosthesis for a joint socket comprising the steps of:

acquiring a first set of data defining in three dimensions at least a portion of a bone of a patient;

computing a second set of data based upon the first set of data;
and

manufacturing said prosthesis to include a functional part and an attachment part extending therefrom,

wherein said manufacturing step includes the step of forming said attachment part based on the second set of data.

10. The method of claim 9, wherein said second set of data defines in three dimensions said attachment part.

11. The method of claim 9, wherein:

said attachment part comprises a flange extending from said functional part, and

said flange has defined therein a number of throughholes configured to receive an anchoring element.

12. The method of claim 9, wherein said manufacturing step further includes the steps of:

forming said attachment part to include a bone-facing surface and a tissue-facing surface, and

forming said tissue-facing surface to be a partial facsimile of a surface of said bone.

13. The method of claim 12, wherein said manufacturing step further includes the step of forming said bone-facing surface to possess a shape complementary to a portion of the surface of said bone.

14. The method of claim 13, wherein:

said attachment part possesses a cup interface end portion and a free end portion, and

said attachment part possesses a uniform thickness extending from said cup interface end portion to said free end portion.

15. The method of claim 9, wherein said manufacturing step further includes the steps of:

forming said attachment part to include a bone-facing surface and a tissue-facing surface, and

forming said bone-facing surface to possess a shape complementary to a portion of a surface of said bone.

16. The method of claim 9, further comprising the step of acquiring a third set of data defining in three dimensions other bone structure of the patient, at least some of said other bone structure contralaterally corresponding to said bone of the patient, wherein:

said manufacturing step includes the step of arranging an angular orientation of said functional part relative to at least one of said attachment part and the bone of the patient based on said third set of data.

17. The method of claim 9, wherein said manufacturing step includes manufacturing said acetabular cup from pre-determined data.

18. A method of making an acetabular prosthesis comprising the steps of:

acquiring a first set of data defining in three dimensions at least a portion of a bone of a patient;

computing a second set of data based upon the first set of data;

manufacturing said prosthesis to include an acetabular cup and an attachment part extending therefrom, wherein said manufacturing step includes the steps of:

forming said attachment part based on the second set of data,

forming said attachment part to include a bone-facing surface and a tissue-facing surface, and

forming said tissue-facing surface to be a partial facsimile of a surface of said bone.

19. The method of claim 18, wherein said second set of data defines in three dimensions said attachment part.

20. The method of claim 18, wherein:

said attachment part comprises a flange extending from said acetabular cup, and

said flange has defined therein a number of throughholes configured to receive an anchoring element.

21. The method of claim 18, further comprising the step of acquiring a third set of data defining in three dimensions other bone structure of the patient, at least some of said other bone structure contralaterally corresponding to said bone of the patient, wherein:

said manufacturing step includes the step of arranging an angular orientation of said acetabular cup relative to at least one of said attachment part and the bone of the patient based on said third set of data.

22. An acetabular prosthesis, comprising:

an acetabular cup; and

a flange attached to said acetabular cup, said flange is prepared by a process including the steps of:

acquiring a first set of data defining in three dimensions at least a portion of a bone of a patient;

computing a second set of data based upon the first set of data; and

manufacturing said flange based upon the second set of data.

23. The prosthesis of claim 22, wherein said second set of data defines in three dimensions said flange.

24. The prosthesis of claim 22, wherein said flange has defined therein a number of throughholes configured to receive an anchoring element.

25. The prosthesis of claim 22, wherein said manufacturing step further includes the steps of:

forming said flange to include a bone-facing surface and a tissue-facing surface, and

forming said tissue-facing surface to be a partial facsimile of a surface of said bone.

26. The prosthesis of claim 25, wherein said manufacturing step further includes the step of forming said bone-facing surface to possess a shape complementary to a portion of the surface of said bone.

27. The prosthesis of claim 22, wherein:

said flange possesses a cup interface end portion and a free end portion, and

said flange possesses a uniform thickness extending from said cup interface end portion to said free end portion.

28. The prosthesis of claim 22, wherein said manufacturing step further includes the steps of:

forming said flange to include a bone-facing surface and a tissue-facing surface, and

forming said bone-facing surface to possess a shape complementary to a portion of a surface of said bone.

29. The prosthesis of claim 22, wherein the process further comprises the step of acquiring a third set of data defining in three dimensions other bone structure of the patient, at least some of said other bone structure contralaterally corresponding to said bone of the patient, and wherein said manufacturing step includes the step of arranging an angular orientation of said acetabular cup relative to at least one of said flange and the bone of the patient based on said third set of data.